

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019851**Date Inspected:** 31-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Qiu Wen**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

Bay 14

WELDING:

Segment 14W

This QA Inspector observed ZPMC qualified welding personnel identified as 066239 perform Flux Core Arc Welding (FCAW), weld joint identified as SEG3020G-062; located On Orthotropic Box Girder (OBG) FB3339A to LD30484 CJP Weld; ABF Quality Assurance (QA) is identified as Mr. Shen Jian Yuan. This QA Inspector observed a welding current of approximately 307 amps and 25.9 volts and the base material appears to have been being preheated by an electrical heating elements prior to welding. ABF Quality Assurance (QA) Mr. Xiao Jun Peng was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-B-T-2232-ESAB. See attached photo for further details.

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## WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC qualified welding personnel identified as 066239 perform Flux Core Arc Welding (FCAW), weld joint identified as DP3169-001-262; located On Orthotropic Box Girder (OBG) Deck Panel to Stiffener PJP Weld; ABF Quality Assurance (QA) is identified as Mr. Shen Jian Yuan. This QA Inspector observed a welding current of approximately 290 amps and 25.9 volts and the base material appears to have been being preheated by an electrical heating elements prior to welding. ABF Quality Assurance (QA) Mr. Shao Jian Yuan was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-B-T-2232-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 068445 perform Flux Core Arc Welding (FCAW), weld joint identified as DP3170-001-019; located On Orthotropic Box Girder (OBG) Deck Panel to Stiffener PJP Weld; ABF Quality Assurance (QA) is identified as Mr. Shen Jian Yuan. This QA Inspector observed a welding current of approximately 267 amps and 24.0 volts and the base material appears to have been being preheated by an electrical heating elements prior to welding. ABF Quality Assurance (QA) Mr. Shao Jian Yuan was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-B-T-2232-ESAB.

### Segment 14W

This QA Inspector observed ZPMC qualified welding personnel identified as 067707 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP3173-001-244; located On Orthotropic Box Girder (OBG) Deck Panel to Stiffener PJP Weld; ABF Quality Assurance (QA) Mr. Shao Jian Yuan was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM.1. See attached photo for further details.

This QA Inspector observed ZPMC qualified welding personnel identified as 067904 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP3173-001-245; located On Orthotropic Box Girder (OBG) Deck Panel to Stiffener PJP Weld; ABF Quality Assurance (QA) Mr. Shao Jian Yuan was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 037779 perform Shielded Metal Arc Welding (SMAW), weld joint identified as DP3173-001-246; located On Orthotropic Box Girder (OBG) Deck Panel to Stiffener PJP Weld; ABF Quality Assurance (QA) Mr. Shao Jian Yuan was onsite monitoring the welding variables. The welding variables recorded by QA appeared to comply with applicable WPS-B-P-2212-TC-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 066038 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3020E-052; located On Orthotropic Box Girder (OBG) Bottom Plate to floor Beam CJP Weld; The Critical Welding Repair Report (CWRR) was B-WR2734. ZPMC Quality Control (QC) is identified as Mr. Li Ming Yang. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-2G (2F) FCM-Repair-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract

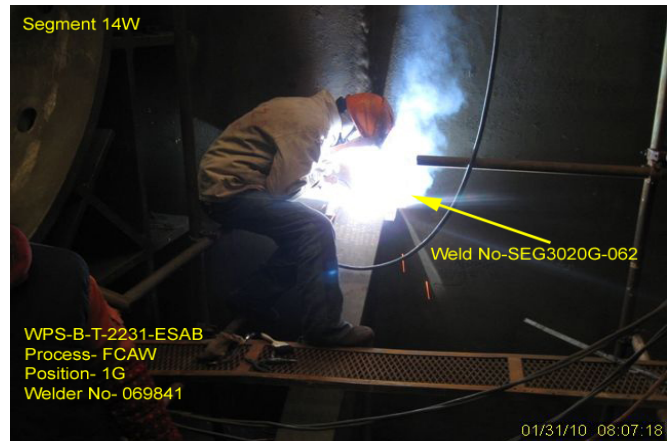
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# WELDING INSPECTION REPORT

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documents.



## Summary of Conversations:

No significant conversations were reported on this date.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Prabhune,Manoj
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Quality Assurance Inspector
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<b>Reviewed By:</b>	Peterson,Art
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QA Reviewer
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